ABSTRACT

A navigation system with decryption functions. The navigation system may receive from a portable data storage medium an encrypted authentication key, an encrypted first portion of a geographic database, and an unencrypted second portion of the geographic database. The navigation system may then decrypt the encrypted authentication key so as to gain access to a set of verification information and to a decryption key for decryption of the encrypted first portion. The navigation system may then use the verification information to validate use of the database, such as by ensuring that the data storage medium is authorized to hold the database or that the navigation system is authorized to access the database. In turn, the navigation system may then use the decryption key to decrypt the encrypted first portion, so as to gain access to the database as a whole. The navigation system may then use information in the database to convert location coordinates into map information for presentation to a user. Also disclosed is a secure geographic database for use with a navigation system.